

## SCIENCE AND INVENTION.

## Work of the World's Busy Brains in Discovering, Inventing and Creating.

## ESSENTIAL OILS.

The head of the immense business done in essential oils is the firm of Schimmel & Co., which has establishments near Leipzig and in London and New York. Their semi-annual report which gives a review of the essential-oil trade of the world, is always awaited with great interest and eagerly read. The report for the last half of 1905 has many new features.

The United States is the largest consumer of many essential oils. Among these is Cajeput oil, which comes from Macassar and of which we took last year 31,127 pounds, or more than any other country. We took the astonishing amount of 591,924 pounds of oil of cinnamon, but Germany greatly exceeds us. The citronella oil is also a very important one, our importations last year reaching 320,908 pounds. The citronella oil all comes from Ceylon, and has been the subject of wholesale and very coarse adulteration, usually being mixed with Russian petroleum. There is being a strong effort made to diminish this practice, and as a result there has been somewhat less adulterated oil put upon the market.

There is a possibility of an essential-oil business developing in South Dakota, from the distillation of the Erigeron Canadensis, popularly known as butterfly weed or fireweed. It grows abundantly in South Dakota, and is found to yield an oil of dark color and highly aromatic.

Bergamot oil comes from Italy, and the immensity of the business is surprising. In eight months last year was exported from Italy 523,453 kilos, each kilo being a little over a quart.

Australia has developed quite a business in Eucalyptus oil, though she has competitors in Portugal and Algeria.

In Galicia and Roumania there are great quantities of fennel oil produced. The leading oil product of Algeria is geranium oil, which brings from \$4.60 a quart upward.

The lavender oil business is an immense industry in some parts of England and France.

The most important essential-oil business in this country is that of peppermint, in which we lead the rest of the world. This production is confined to a few counties in New York, Michigan and Indiana. In Wayne County, N. Y., there were last year 933 acres under cultivation, which was something of an increase over the previous year, as the high prices had tempted farmers to go into the business. They suffered some damage from the rain and an insect attacked their plants, but they have done fairly well in spite of these detriments.

Lyons, N. Y., was formerly the center of the peppermint-oil trade, but lately Newark has assumed that position. In Michigan there are about 7,375 acres in peppermint in the Counties of Muskegon, Allegan, Van Buren, Cass, Berrien, St. Joseph, Branch and Kalamazoo. The weather was not favorable last year, especially on the lower lying fields, which were too damp. Cloud-bursts also occasioned much damage. Still, the yield averaged about 25 pounds per acre and was fairly remunerative. There are about 1,000 acres of peppermint in Indiana, in the neighborhood of South Bend, Mishawaka and Osceola, which is a doubling of the area of the previous year, and it is believed that the yield will be about 35 pounds per acre. Crude American peppermint oil reached its highest price of \$5 per pound in October, 1902, and then began to fall until it reached \$2.50, since which time the price has been going up, though it is yet far from its maximum figure.

The Japanese are our strongest competitors, but the Japanese oil is not equal to that raised in this country. A considerable quantity is raised at Mitcham, in England, but this has lost caste owing to the constant adulteration.

The United States led all the countries of the world in its consumption of rose oil, taking almost half of the world's supply.

The Philippine Islands have a monopoly of the production of Ylang Ylang oil, and in 1904 exported to the value of \$103,247. The Ylang Ylang oil has been successfully imitated by a synthesis of coal-tar compounds, and which is now offered at a great reduction from the price of pure oil.

## THE PRODUCER GAS ENGINE.

The producer gas engine is the coming motive power, and undoubtedly within a few years will divide the world with water as a source of original power. The Thornycroft Ship Building Co., one of the most extensive establishments in the world, has acquired the rights to the Captain producer gas engine, and is so satisfied with its success with smaller engines that it is now building one of 500-horsepower. The total weight of the engine will be only 75 per cent of the ordinary engines, and will only burn one-half as much fuel. It will be remembered that this type of engine uses the coal to produce gas, which is then exploded in the ordinary manner in a cylinder. The engine which the Thornycroft Co. is building will be installed in a Glasgow coasting steamer, and if it proves as satisfactory as is expected the firm will then proceed to build a 1,000-horsepower engine, availing itself of the experiences gained from the working of the smaller one. The British Admiralty is also deeply interested in this type of engine, and is building one at Manchester, which will be subjected to severe tests to determine upon the adoption of the gas producer engine for the navy. So far the trials of the smaller engines on small craft have been fully up to expectation, and they will next be tried on dredges and towing craft, where it is desired to get the greatest amount of power at the least expense.

## APPLICATIONS FOR PATENTS.

The Commissioner of Patents promulgates the following order:

"It is hereby ordered that applications shall not be given serial numbers as complete applications and forwarded to the Examining Divisions for examination (1) when the petition has not been signed by the inventor; (2) when the specification and claims have not been signed by the inventor and the signature attested by two witnesses (sec. 4888, Rev. Stats.); (3) when the drawing has not been signed by the inventor or his attorney in fact and the signature attested by two witnesses (sec. 4889, Rev. Stats.); and (4) when the oath to the application does not fill the

requirements of secs. 4887 and 4892, Revised Statutes. "The requirements of section 4896, Revised Statutes, respecting the right of executor or administrator to make application for a patent for the invention of a deceased person must also be observed before the application will be considered as complete and forwarded for examination. "This order, so far as applicable, relates to applications for the registration of trade-marks, labels and prints, which must in all respects comply with the requirements of the statutes. "The order, above mentioned, were amended by the act of March 3, 1903."

**WORK OF THE PATENT OFFICE.** For the week ended Dec. 26, 1905, the Patent Office issued 556 patents, 11 designs, 145 trade-marks, 18 labels, eight prints, two reissues; total, 740, of which 506 patents and designs and 167 trade-marks went to citizens of the United States and 61 patents and four trade-marks to citizens of foreign countries.

Dr. S. N. McClean, of Iowa, believes that he has invented a gun which will not kick. This is a matter of more importance, even than the unlucky man who has to fire a kicking gun appreciates. The recoil of field and siege pieces is a problem of the highest consequence to artillerymen. Where a force of 150 pounds is exerted to the square inch is exerted in firing a piece, only six pounds go to the propulsion of the ball, while the remainder is expended upon the gun, and very elaborate and expensive devices of water chambers, oil chambers and springs have been employed to take up this recoil. While these are possible with heavy guns in position, they are too cumbersome for field guns, and consequently the recoil of the gun is a serious obstacle to accurate firing. A field piece always runs back some distance upon being discharged. If the shot has been a lucky one, then the cannoners try to put it exactly where it was before to repeat their success, which they rarely do. Dr. McClean calls his gun "fool proof," because it is so simple that it is impossible to put it out of order. On the muzzle of the gun is screwed a pear-shaped device with grooves and little vents, which it is said will take up the gas as it comes pouring out and use it to pull the gun forward with an energy equal to the power of the kick. Dr. McClean has also "knurled" the gun; that is, he has cross-grained it by a series of cuts which give a large radiating surface to prevent its becoming unduly heated. The gun has been under test at the Proving Station at Sandy Hook for some months, but the experts will not say anything about its success or otherwise.

The severest test that has been made of the wireless telegraphy is now going on in following the course of the dry-dock Dewey, which will be followed as far as possible in its journey across the Atlantic by the wireless station at St. Augustine, Fla. The vessels conveying the dry-dock are equipped with the latest devices in wireless telegraphy, and so far they have worked very well. Messages have been sent 225 miles through a terrific gale and received as perfectly as a communication by telephone. It is expected that the daily messages will be kept up until the Dewey is at least 1,500 miles out into the Atlantic.

An old question among scientists is again receiving much attention. Taking as a postulate that power or energy is as constant an element as matter, and can not be destroyed, the question is: A coiled spring represents force in its coiling, and the force goes into the spring, to be again expended. If the spring is dissolved in acid, what becomes of the force contained in the spring? This is something for theorists to think out these long winter nights.

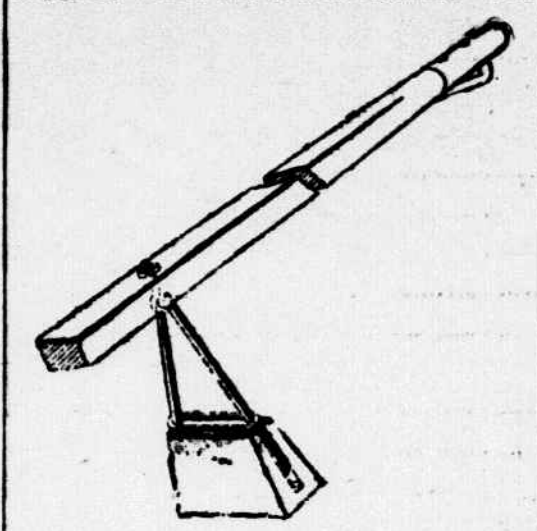
A French scientist recently read a paper before the Academie as to the toxic effects of an injection from the eggs of ducks, chickens and turtles. By injecting a solution from the yolks of eggs in distilled water into the veins of rabbits he killed them in a short time. Some died in a few minutes and the longest lived two hours. Duck eggs seem more poisonous than chicken eggs, while those of the turtle still more speedily caused convulsion and lock-jaw. The albumen forming the white of turtles' eggs was found equally powerful.

Dr. Sheldon Jackson, the United States General Agent for Education in Alaska, denies that the reindeer which were imported into Alaska at great expense are becoming extinct. He denies this most positively, and says that their introduction has been a great success. Since 1892 1,280 reindeer were brought from Siberia to Alaska. From this original herd 13,245 fawns have been born, of which 2,978 were born in the Spring of 1905. Subtracting all that have been butchered for food and that have died, there remain at the present time 10,241 reindeer, which indicates that they are doubling every year.

The American Association for the Advancement of Science ended its 56th Annual Convention at New Orleans Jan. 3 with a symposium on the boll weevil, in which Prof. W. D. Hunter, who has in charge of the boll-weevil work for the Government, read a treatise stating that the weevil was to be feared more than ever, although it had done little damage during the past year. No successful way has been found to combat the pest except by raising early varieties of cotton, which will mature before the weevils begin their devastation. Several other authorities agreed with Prof. Hunter.

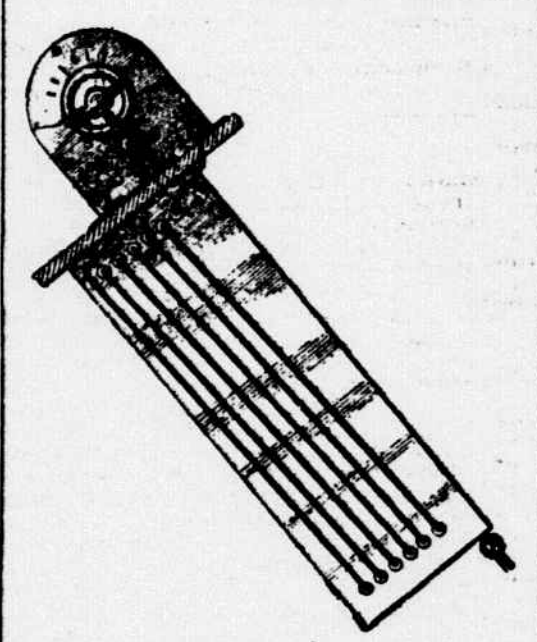
**Clothes-Pin.** The continual surprise in reading the Patent Office Gazette is the number of improvements that are constantly being made in simple, every-day things, which one would think had been perfected long ago. Frederick H. Perry, West Medford, Mass., has patented a clothes-pin which has a new form of application of the wire spring to the wooden jaws,

**Tongue Support.** John F. Cell, Chambersburg, Pa., has received a patent for a draft tongue support, which has a base member with



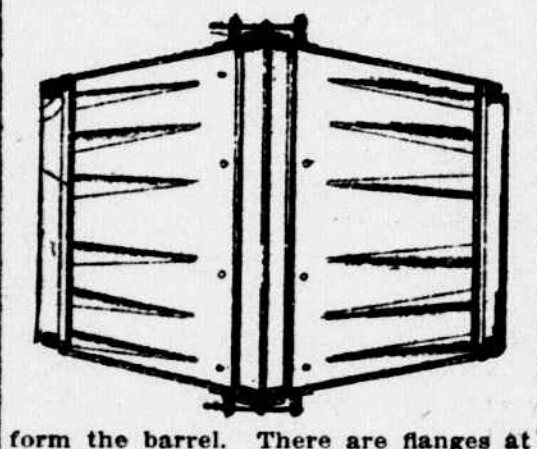
U-shaped arms for support from the rear of the tongue and to counterbalance its weight.

**Electric Water Heater.** James P. Erie, Los Angeles, Cal., has patented an electric water heater having the usual inlet and outlet pipes, a



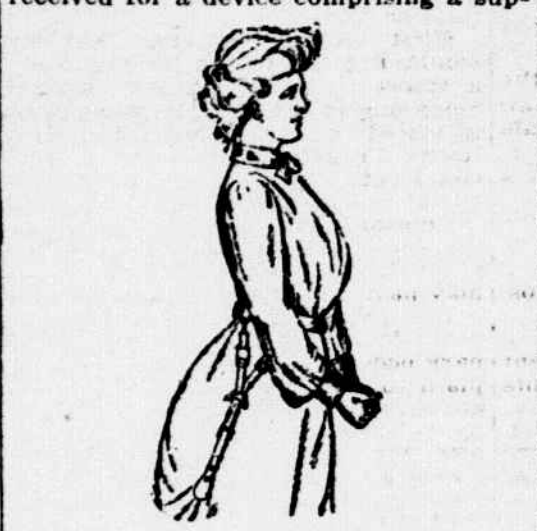
tortuous water-pipe extending through the chamber and connections with a dynamo, so as to send a current of electricity through the chamber.

**Sectional Metal Barrel.** Gottlieb Klenk, Danfonia, O., has received a patent for a metal barrel made in two sections, which are united to



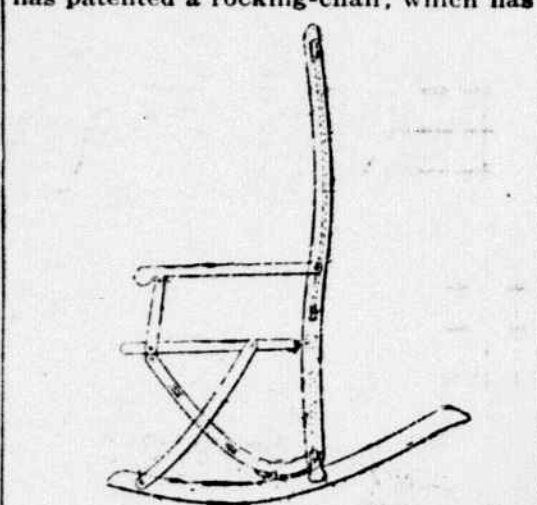
form the barrel. There are flanges at the open ends which fit over reciprocal flanges on the other section of the barrel to form a water-tight receptacle.

**Skirt Supporter.** Joseph M. Roberts, Diego, Fla., has added to the innumerable patents for skirt supporters by one which he has received for a device comprising a sup-



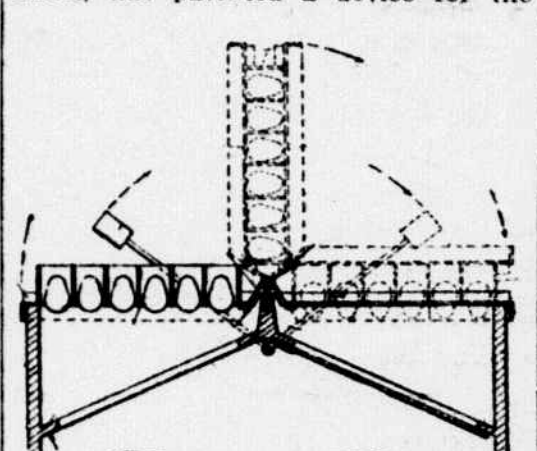
porting belt, suspension straps and engaging clasps. The straps are arranged so as to be adjustable, and some of them have hooks to make them readily attachable or detachable on the belt.

**Adjustable Rocking-Chair.** Warner S. Lewis, Wilmington, Del., has patented a rocking-chair, which has



its back, seat and supports pivotally connected, so that it can be closed up or adjusted for use at several angles.

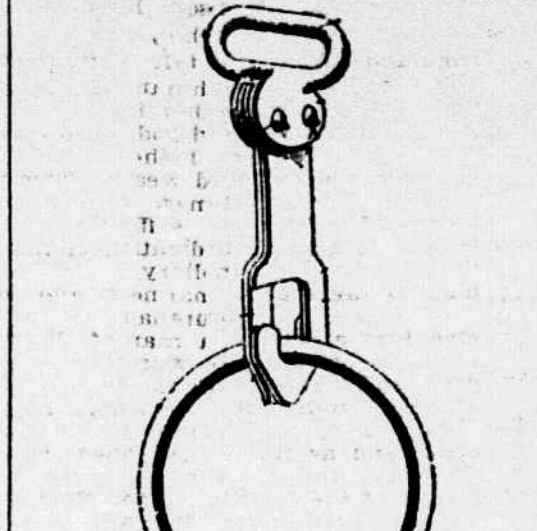
**Egg Tester.** Jacob B. Shoemaker, New Lothrop, Mich., has patented a device for the



rapid and continuous testing of eggs, which are brought forward on apertured trays and automatically brought before the tester.

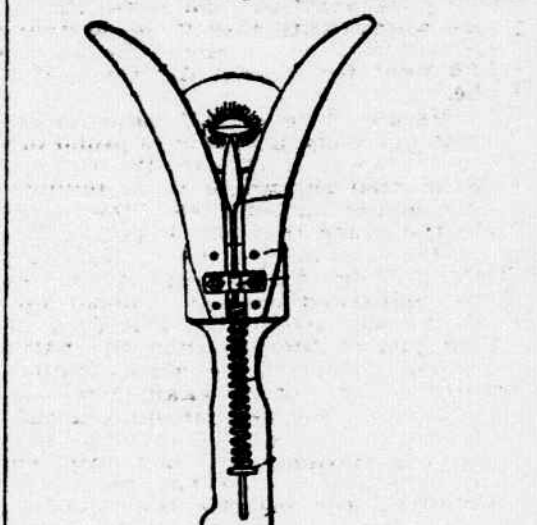
**How to Cure Rheumatism** I searched the whole earth for a specific for Rheumatism—something that I or any physician could feel safe in prescribing—something that we could count on not only occasionally, but with reasonable certainty. For the ravages of Rheumatism are everywhere and genuine relief is rare. After twenty years of search and experiment I learned of the German chemical I now employ. And I knew that my search and my efforts were well rewarded. For this chemical, in combination with others, gave me the basis of a remedy which in the cure of Rheumatism has been practically certain. In many, many tests and difficult cases this prescription has with regularity justified the confidence I had in it. Mild cases are sometimes reached by a single package—for sale by 40,000 Druggists.

**'Snap-Hook.'** William R. Lapsley, McAfee, Ky., has received a patent for a new form of a snap-hook, which is made up of plates



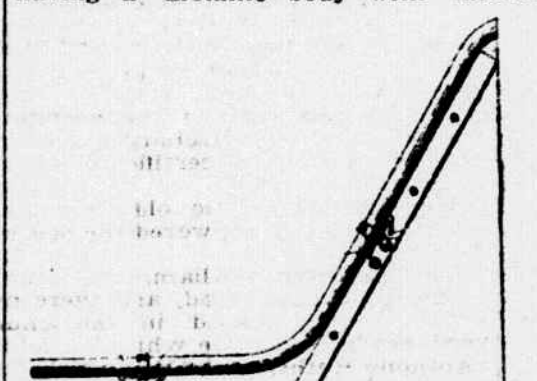
laid flat through their entire length, with a plurality of rivets passing through the ears to prevent any rocking between the hook and the loop.

**Fruit-Cutter and Pitter.** King T. Lynn, Fresno, Cal., has patented what seems to be a labor-saving device for cutting stone fruits and re-



moving the pits. It is a stem fastened to the table supporting two diverging blades with a plunger between them operated by a spring. The fruit is cut and the pit expelled with one motion.

**Hose Spider.** Charles M. Bowman, Lebanon, Pa., has received a patent for a hose spider having a metallic body with lateral

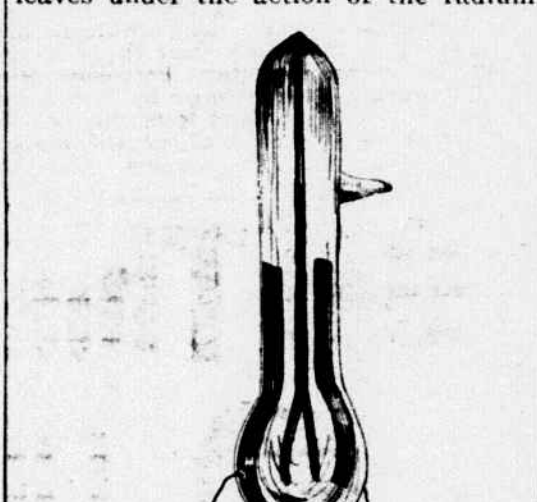


lugs engaging wheels and connection with the hose to facilitate the equal sprinkling of any plot of ground.

**A RADIUM CLOCK** Which Will Run 20,000 Years Without Repairs or Regulating.

Hon. J. R. Strutt, a British scientist, showed a device to a scientific society by which radium could be made to run a clock. An ingenious jeweler took the idea, and has put on the market at \$50 each clocks which will keep accurate time until they are worn out. The instrument is very small, being inclosed in a mahogany frame measuring about six inches by four inches. There is a small glass tube in which is placed about one-twelfth of a grain of radium, and supported in a constant glass vessel by a rod of quartz. At the lower end of this tube is an electroscop, consisting of two aluminum leaves or films. The surface of the glass vessel is treated with phosphoric acid, to render it conductive.

At intervals of one minute the silver leaves under the action of the radium



move apart and touch the sides of the glass vessel. This action is caused as follows: After the Beta rays are carried away, the positive charge which is left behind is passed on to these two leaves. Under this stimulus they expand until one of them touches the side of the glass vessel. This contact causes the charge to be conveyed to the earth. The leaf then falls back to its original position by gravitation, when the cycle of operations is once more repeated, and continued until the circuit is broken. Owing to the constant and exact regularity of the movements, the instrument resolves itself into a clock which will last incessantly if untouched, until wear is exhibited by the moving parts. The life, however, is estimated at several thousand years. Once set in motion, the instrument requires no attention whatever, and its time-keeping qualities are infallible. It is a cleaner, simpler than in wireless telegraphy, is introduced, the clock can be made to ring an electric bell at every discharging of the current being transmitted to the bell through aluminum wires.

**RADIUM CLOCK.** move apart and touch the sides of the glass vessel. This action is caused as follows: After the Beta rays are carried away, the positive charge which is left behind is passed on to these two leaves. Under this stimulus they expand until one of them touches the side of the glass vessel. This contact causes the charge to be conveyed to the earth. The leaf then falls back to its original position by gravitation, when the cycle of operations is once more repeated, and continued until the circuit is broken. Owing to the constant and exact regularity of the movements, the instrument resolves itself into a clock which will last incessantly if untouched, until wear is exhibited by the moving parts. The life, however, is estimated at several thousand years. Once set in motion, the instrument requires no attention whatever, and its time-keeping qualities are infallible. It is a cleaner, simpler than in wireless telegraphy, is introduced, the clock can be made to ring an electric bell at every discharging of the current being transmitted to the bell through aluminum wires.

**How to Cure Rheumatism** I don't mean that Dr. Shoop's Rheumatic Tablets can turn bony joints into flesh again and never fail—that is impossible. But they will with reasonable certainty drive from the blood the poison that causes pain and swelling, and then that is the end of the pain and swelling—the end of the suffering—the end of Rheumatism. Any Rheumatic sufferer who writes may receive my little book on Rheumatism, including professional advice as to diet, etc., free. With the book I will also send without charge, my "Health Token," an intended device to good health. Address Dr. Shoop, Box 231, Racine, Wis.

**THE MAMMOTH DRY-DOCK.** The Great Engineering Triumph Which Is Now on Its Way Over the Wide Ocean.

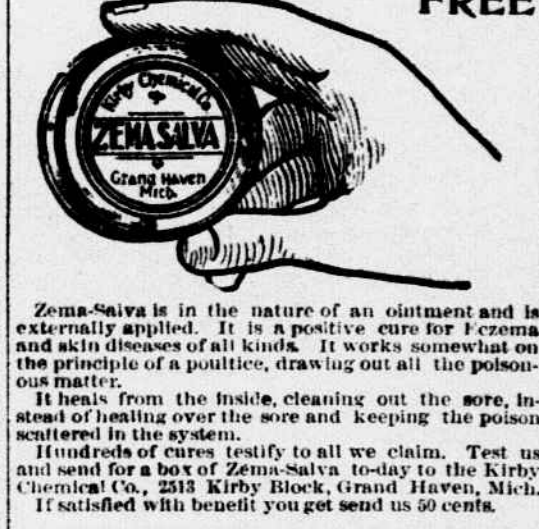
All engineers and naval people are now watching with intense interest the progress of the mammoth dry-dock Dewey on its way over the waste of waters to its destined location at Cavite in Manila Bay. This dry-dock, which was imperatively needed for our vessels at the Eastern stations, is something unprecedented in the way of dock building, and its towage such a great distance is equally without parallel. Hereinbefore our vessels in the Far East have been subject to the courtesy of the English and Japanese when it was necessary to dock them for any purpose. While those countries have been willing to extend us every accommodation, it was not the proper thing to be dependent upon them, and, besides, their docks were not sufficiently large and well-appointed for our great war vessels. Therefore the construction of a dock for ourselves became good policy. As the shores of Manila Bay are not favorable to the construction of the ordinary dry-dock on land, the floating dry-dock had to be adopted. It could be built very much cheaper and better in this country, and the problem of towing it halfway around the world, while difficult, was not insuperable, and therefore its attempt was decided upon. Since its completion the Dewey has been lying in Chesapeake Bay off Solomon's Island, and while there has been subjected to the severest tests in docking the cruiser Colorado and the battleship Iowa. The Colorado has 13,300 tons displacement and the Iowa 11,600 tons. In the operation the dry-dock was sunk, the ship moved directly over it, and the water pumped out of the dock, whereupon it rises and lifts the ship out of the water. In docking the Colorado the dock was sunk in one hour and 24 minutes and pumped out again in one hour and two minutes. The Colorado was lifted two and a half feet above the water, allowing every part of her hull to be carefully examined. The supervising engineers say that the dock has sufficient strength and capacity for a ship of 20,000 tons, and in spite of the immense weight of the dock at the end of 24 hours was but one and one-sixteenth inches. The dock represents a weight of nearly 11,000 tons, and is a cumbersome thing to tow, since it stands so far above water.

The towing fleet selected is composed of three United States colliers. The largest of these is the "Glacier," a ship of 7,000 tons displacement and having engines of 5,000-horsepower. The "Glacier" will be assisted by the "Cascara," of 5,016 tons displacement, having engines of 1,500-horsepower.

The route selected is by way of the Suez Canal, the Mediterranean Sea, the Canal, the Indian Ocean, the Straits of Malacca and the China Sea, although it may be necessary to take the dock to the south of Sumatra Island and not through the Straits. The question of towing through the Suez Canal is no small problem, for the minimum width which will accommodate the structure is 200 feet, the width of the dock itself being 134 feet. Therefore but 66 feet leeway is allowed to work it through the narrowest part of the canal. The Navy Department calculates that the fleet can move at the rate of about 100 miles per day, allowing about four months for the entire voyage. In towing, the cables used will be attached to machines which automatically pay out and haul in the connecting lines, thus easing of the great strain which would probably break the cables in a heavy sea.

**ECZEMA** Cured 50 Cent Box Free to Any One—No Money Required.

We want you to try at our expense the new external, absorbable skin cure, Zema-Salva, which has made so many wonderful cures of acute and chronic skin diseases. We know what it can do, and are, therefore, willing to stand all the tests. We could not do this if our remedy did not advance. Remember, you try it free—no cost in advance. If helped, we expect 50 cents.



Zema-Salva is in the nature of an ointment and is externally applied. It is a positive cure for Eczema and skin diseases of all kinds. It works some of the principle of a poultice, drawing out all the poisonous matter. It heats from the inside, cleaning out the pores, instead of heating over the sore and keeping the poison scattered in the system. Hundreds of cures testify to all we claim. Test us and send for a box of Zema-Salva today to the Zema-Salva Co., 231 Kirby Block, Grand Haven, Mich. It is satisfied with benefit you get send us 50 cents.

**Duty of Married Soldiers.** It does not follow as a matter of course, if a man was a soldier, even if he is a pensioner, that it will be an easy matter for his widow to get a pension. As a matter of fact widows' claims are unnecessarily delayed and in some cases never allowed for lack of evidence, which the husband, usually, could have supplied during his lifetime.

This important matter has been discussed, from time to time, in the columns of The National Tribune, and has been made the subject of orders by Commanders-in-Chief of the Grand Army, but every appeal heretofore was deficient in one essential particular: no safe and permanent place was suggested for the custody of the information.

The National Tribune Co., in a practical way, proposes to supply this deficiency. In a fire-proof room, in its own building and under lock and key to insure privacy, it will care for such papers and information until such time as they may be needed, even if such time is many years distant. The National Tribune Co. is incorporated. Having a perpetual existence, the death of the present managers, the company will not disturb the business or change the custody of the papers. No safer place in the world can be found for the purpose.

**Preliminary Report** To aid my widow, if I leave one, in getting her pension. Note.—This report is short, and can be easily written out on letter or legal cap paper. This course avoids cutting the paper. Be sure to write the names and dates clearly and distinctly. When report is ready mail it to THE NATIONAL TRIBUNE, Washington, D. C.



Among the thousands and thousands of men and women throughout the land who are suffering with Rheumatism, pain in their Back, Headaches, Nervousness and one or more of a dozen other ailments it would be found, upon close examination, that in nine cases out of ten the direct cause could be traced to the Stomach. It isn't in a condition to perform its duties as it should.

The above picture represents a healthy stomach. If you have one like that you are better off than a dyspeptic millionaire. You've taken medicine—of course you have—lots and lots of it—perhaps you've taken it for your Kidneys, Liver, Heart or Nerves, and while it has helped you for a few hours, when the next day is around you are just as sick as ever—usually worse—as sickness grows worse day by day unless it is treated properly.

**DOCTOR YOUR STOMACH**—start at once—the sooner you get it in order—the better it will be in a condition to easily and properly digest your food, the sooner you will be a well person again. Start now and take

**Zaegel's Swedish-Essence** and you will at once notice the old-time appetite coming back—you'll sleep better—feel stronger and in a short time be a healthy person again. It is not a secret remedy, but a combination of roots and herbs, the names of which are on every package. This medicine, which has cured thousands, acts directly on the Stomach, regulates the Heart, Bowels, Liver and Kidneys, and promptly cures these as well as diseases peculiar to women.

In the South it has been found to cure and prevent malaria and all kinds of fever. If you doubt this, you can test its curative virtue for yourself at absolutely no expense. Send us your name and address, describing your ailment, and we will mail you, under plain wrapper, securely sealed, a trial bottle of Zaegel's Swedish-Essence that will add health and long years to your life. It is free now, so do not fail to write to-day to M. R. Zaegel & Co., 124 Main St., Sheboygan, Wis.

and the "Brutus," of 6,000 tons and 1,250-horsepower. Consequently, the entire towing power will aggregate nearly 8,000-horsepower. The smaller craft, however, will be used not only for direct towing, but for steadying the dock in rough weather. In case of a storm, the suggestion has been made that it can be sunk to its maximum depth, thus exposing but a small portion of its side walls to the sea. The engineers, however, are of the opinion that its construction is sufficiently heavy to withstand a very severe strain. The route selected is by way of the Suez Canal, the Mediterranean Sea, the Canal, the Indian Ocean, the Straits of Malacca and the China Sea, although it may be necessary to take the dock to the south of Sumatra Island and not through the Straits. The question of towing through the Suez Canal is no small problem, for the minimum width which will accommodate the structure is 200 feet, the width of the dock itself being 134 feet. Therefore but 66 feet leeway is allowed to work it through the narrowest part of the canal. The Navy Department calculates that the fleet can move at the rate of about 100 miles per day, allowing about four months for the entire voyage. In towing, the cables used will be attached to machines which automatically pay out and haul in the connecting lines, thus easing of the great strain which would probably break the cables in a heavy sea.

**As Tamed.** (Chicago Post.) She stands upon the ladder tall, Her Christy wreath all round her head; She holds the nail against the wall, Prepared to hit it steady.

But hark! what means that fearful wall? Its anguish would affright one— It simply means she hit a nail, But it was not the right one.

**SCIENTIFIC NOTES.** A test of the McClean automatic gun was made from the deck of the United States revenue cutter "Mohawk," some 30 miles off Sandy Hook. The gun is a one-pounder. From 75 to 100 rounds were fired very successfully. It is reported that the distance is 11,650 miles, going by way of the Straits of Gibraltar, the Mediterranean Sea, the Canal, the Indian Ocean, the Straits of Malacca and the China Sea, although it may be necessary to take the dock to the south of Sumatra Island and not through the Straits. The question of towing through the Suez Canal is no small problem, for the minimum width which will accommodate the structure is 200 feet, the width of the dock itself being 134 feet. Therefore but 66 feet leeway is allowed to work it through the narrowest part of the canal. The Navy Department calculates that the fleet can move at the rate of about 100 miles per day, allowing about four months for the entire voyage. In towing, the cables used will be attached to machines which automatically pay out and haul in the connecting lines, thus easing of the great strain which would probably break the cables in a heavy sea.

**LOCOMOTOR ATAXIA** AND PARALYSIS CONQUERED AT LAST BY DR. CHASE'S BLOOD PURIFIER. Write me about your case. Address and proof of cure FREE. DR. CHASE, 224 N. 10th St., PHILADELPHIA, PA.

**PATENTS—PENSIONS** Consultation Free. Contingent Fee. Solicitors wanted.

"The firm is worthy of confidence upon the ground both of competency and honesty."—THE NATIONAL TRIBUNE, April 1, 1907. Founded 1861 by Milo R. Stevens, 1010 Butler Bldg., Washington, D. C. & CO., 809 15th St. N. W., Washington, D. C. Branches at Chicago, Cleveland, Detroit.

**Duty of Married Soldiers.** But The National Tribune will go further in this commendable work. It will assist in getting in shape the proofs and information required. The first step for every comrade is to answer the few simple questions that are asked in the Preliminary Report. This report will close the case and enable The National Tribune to complete all the proof required. There will be no charge whatever for this service, but it will be expected of every comrade that he will call the attention of other married comrades to this matter and influence them to do likewise. No other missionary work among comrades can be productive of more good. Many comrades who are not subscribers to The National Tribune will not fear of this important matter. If subscribers do not call their attention to it. Extra blanks will be sent for distribution upon request. All comrades are requested to make the Preliminary Report, including those who have married since June 27, 1890. Comrades who attend to this matter promptly will be taking the best possible step toward securing for their widows the higher rate of pension.

**Preliminary Report** To aid my widow, if I leave one, in getting her pension. Note.—This report is short, and can be easily written out on letter or legal cap paper. This course avoids cutting the paper. Be sure to write the names and dates clearly and distinctly. When report is ready mail it to THE NATIONAL TRIBUNE, Washington, D. C.

Date....., 1905. (Write above number and street, or R. F. D. No., if any.) Soldier's Name....., Present P. O..... State..... I was in the service from..... day of....., 186....., to he..... day of....., 186....., as a..... (Give rank, also company and regiment.) and was honorably discharged at....., on the..... day of....., 186..... Are you a pensioner?..... At what rate? \$..... per month (Yes or no.) Were you pensioned under the old law or the new?..... (The new law is the act of June 27, 1890.) What wounds, diseases or disabilities, if any, are written on your pension certificate?..... I was married to..... on the..... day of....., 18..... by..... at..... (Give name of clergyman or person officiating.) was born..... day of....., 18..... She was born..... day of....., 18..... Is there a court or church record of this marriage?..... Were either of you previously married?..... If a prisoner of war, state for how long..... Remarks:.....